## AMENDMENTS

Please amend the claims as follows:

1. (Currently amended) A fuel cell separator integrated into a fuel cell and forming a fluid flow path, comprising:

a separator base material having a surface; and

a metal coating layer formed from a metal and formed at least on the surface of the separator base material in a region of the separator associated with electrical contact resistance between the separator and an adjacent member of the fuel cell when the separator is brought into contact with the adjacent member when the separator is integrated into the fuel cell,

wherein the metal coating layer has a non-porous crystalline structure, resulting from melting and gradual cooling of the coating layer metal on the separator base material ~~is formed from the metal that is successively subjected to melting and gradual cooling~~.

2. (Currently amended) The separator according to claim 1, wherein the metal coating layer is formed after the surface of the separator base material is subjected to a predetermined treatment, said predetermined treatment comprising forming an underlying coating layer on the surface of the separator base material.

3. (Canceled).

4. (Original) The separator according to claim 1, wherein the metal forming the metal coating layer is a metal having a lower melting point than that of a material of the separator base material.

5. (Original) The separator according to claim 1, wherein the metal coating layer formed from the metal contains a substance added to the metal which reduces a melting point of the metal when added to the metal.

6. (Original) The separator according to claim 1, wherein the metal is tin or a tin alloy.

7. (Original) The separator according to claim 1, wherein the metal is a tin alloy having a lower melting point than that of tin.

8. (Original) The separator according to claim 1, wherein

the metal is composed of a tin alloy, and

at least one of elements of the tin alloy other than tin has higher electrical conductivity in a form of an oxide than the electrical conductivity of tin oxide.

9. (Original) The separator according to claim 1, wherein the metal coating layer includes a plurality of electrically conductive particles.

10. (Original) The separator according to claim 1, wherein the metal coating layer has a corrosion-resistant coating layer formed on the surface of the metal coating layer, the corrosion-resistant coating layer being formed from a corrosion resistant, electrically conductive substance.

11. (Original) The separator according to claim 1, further comprising a carbon coating layer of a carbon material formed at least on the region of the separator base material where the metal coating layer is formed.

12. (Original) The separator according to claim 11, wherein, in addition to the region of the separator base material where the metal coating layer is formed, the carbon coating layer is further formed on a region forming the fluid flow path within the fuel cell.

13. (Currently amended) A fuel cell separator integrated into a fuel cell and forming a fluid flow path, comprising:

a separator base material; and

a metal coating layer formed from a metal and formed at least on the surface of the separator base material in a region of the separator base material associated with an electrical contact resistance between the separator and an adjacent member of the fuel cell when the separator is brought into contact with the adjacent member when the separator is integrated into the fuel cell,

wherein the metal coating layer has a non-porous crystalline structure resulting from melting and gradual cooling of the coating layer metal on the separator base material, and crystal grains of the metal forming the metal coating layer have an average grain size of 0.1 mm or more.

14. (Currently amended) The separator according to claim 13, wherein the metal coating layer is formed after the surface of the separator base material is subjected to a predetermined treatment, said predetermined treatment comprising forming an underlying coating layer on the surface of the separator base material.

15. (Canceled).

16. (Original) The separator according to claim 13, wherein the metal forming the metal coating layer is a metal having a lower melting point than that of a material of the separator base material.

17. (Original) The separator according to claim 13, wherein the metal coating layer formed from the metal contains a substance added to the metal which reduces a melting point of the metal when added to the metal.

18. (Original) The separator according to claim 13, wherein the metal is tin or a tin alloy.

19. (Original) The separator according to claim 13, wherein the metal is a tin alloy having a lower melting point than that of tin.

20. (Original) The separator according to claim 13, wherein
the metal is composed of a tin alloy, and
at least one of elements of the tin alloy other than tin has higher electrical conductivity in a form of an oxide than the electrical conductivity of tin oxide.

21. (Original) The separator according to claim 13, wherein the metal coating layer includes a plurality of electrically conductive particles.

22. (Original) The separator according to claim 13, wherein the metal coating layer has a corrosion-resistant coating layer formed on the surface of the metal coating layer, the corrosion-resistant coating layer being formed from a corrosion resistant, electrically conductive substance.

23. (Original) The separator according to claim 13, further comprising a carbon coating layer of a carbon material formed at least on the region of the separator base material where the metal coating layer is formed.

24. (Original) The separator according to claim 23, wherein, in addition to the region of the separator base material where the metal coating layer is formed, the carbon coating layer is further formed on a region forming the fluid flow path within the fuel cell.

25. (Original) A fuel cell, comprising:

a plurality of single cells stacked on each other,

wherein each of the plurality of single cells contains at least one separator for preventing a plurality of fluids supplied to the fuel cell including a fuel gas and an oxidized gas from being mixed with each other beyond a boundary between the single cells, and

further wherein each separator contained in each of the plurality of single cells is the separator according to claim 1.

26. (Original) A fuel cell, comprising:

a plurality of single cells stacked on each other,

wherein each of the plurality of single cells contains at least one separator for preventing a plurality of fluids supplied to the fuel cell including a fuel gas and an oxidized gas from being mixed with each other beyond a boundary between the single cells, and

further wherein each separator contained in each of the plurality of single cells is the separator according to claim 13.

27-42. (Withdrawn from consideration pursuant to requirement).

Please add the following new claims 43-46:

43. (New) The separator according to claim 2, wherein the predetermined treatment includes, prior to forming the underlying coating layer on the surface of the separator base material, removing a passive layer from the surface of the separator base material.

44. (New) The separator according to claim 2, wherein the predetermined treatment includes, after forming the underlying coating layer on the surface of the separator base material, forming a alloy-plating layer on the underlying coating layer.

45. (New) The separator according to claim 14, wherein the predetermined treatment includes, prior to forming the underlying coating layer on the surface of the separator base material, removing a passive layer from the surface of the separator base material.

46. (New) The separator according to claim 14, wherein the predetermined treatment includes, after forming the underlying coating layer on the surface of the separator base material, forming a alloy-plating layer on the underlying coating layer.

Please cancel claims 3 and 15, without prejudice to the subject matter contained therein.